

# INTERNATIONAL SEARCH REPORT

International Application No

US2004/019593

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H01J49/40

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 080 021 A (WOLLNIK HERMANN) 27 January 1982 (1982-01-27) cited in the application the whole document	1-78
A	SU 1 725 289 A1 (INST YADERNOJ FIZ AN KAZSSR) 7 April 1992 (1992-04-07) cited in the application figure 1	1-78
A	GB 2 361 353 A (* BRUKER DALTONIK GMBH) 17 October 2001 (2001-10-17) page 9, line 11 - line 17; figures 1-3 ----- -/--	1-78

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

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- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

15 April 2005

Date of mailing of the international search report

27/04/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WOLLNIK H: "TIME-OF-FLIGHT MASS ANALYZERS"  MASS SPECTROMETRY REVIEWS, JOHN WILEY AND SONS, NEW YORK, NY, US,  vol. 12, 1993, pages 89-114, XP000195772  ISSN: 0277-7037  page 109, paragraph B - page 110,  paragraph C; figures 15,16</p>	1-78
A	<p>WOLLNIK H ET AL: "TIME-OF-FLIGHT MASS SPECTROMETERS WITH MULTIPLY REFLECTED ION TRAJECTORIES"  INTERNATIONAL JOURNAL OF MASS SPECTROMETRY AND ION PROCESSES, ELSEVIER SCIENTIFIC PUBLISHING CO. AMSTERDAM, NL,  vol. 96, no. 3,  16 April 1990 (1990-04-16), pages 267-274,  XP000117152  ISSN: 0168-1176  page 273, paragraph 2</p>	1-78
A	<p>SAKURAI T ET AL: "Ion optics of a high resolution multipassage mass spectrometer with electrostatic ion mirrors"  NUCLEAR INSTRUMENTS &amp; METHODS IN PHYSICS RESEARCH, SECTION - A: ACCELERATORS, SPECTROMETERS, DETECTORS AND ASSOCIATED EQUIPMENT, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, NL,  vol. A363, no. 1, 1995, pages 473-476,  XP004009692  ISSN: 0168-9002  page 476, left-hand column, lines 2-5;  figures 2,3</p>	1-78
A	<p>US 5 017 780 A (KUTSCHER ET AL)  21 May 1991 (1991-05-21)  column 1, line 23 - column 2, line 3</p>	1-78

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